THE PENDING CLAIMS:

1. (Previously Presented) Process for improving the hydro- and oil-repellence properties of substrata with a low surface energy having a critical wetting tension lower than 40 mN/meter by applying to said substrata mono- and bi-functional (per)fluoropolyether having the following structures:

$W\text{-}L\text{-}YFC\text{-}O\text{-}R_f\text{-}CFY\text{-}L\text{-}W$ (I)

$R_f\text{-}CFY\text{-}L\text{-}W$ (II)

wherein:

L is a linking organic group $-CO\text{-}NR'\text{-}(CH_2)_q-$ with R' =H or C_1-C_4 alkyl; q is an integer comprised between 1 and 8;

Y=F or CF_3;

W is a $-Si(R_1)_\alpha (OR_2)_{3-\alpha}$ group with α = 0, 1, 2, R_1 and R_2 equal to or different from each other are C_1-C_6 alkyl groups, C_1-C_6 alkyl groups containing one or more ether 0, C_6-C_{10} aryl groups, C_7-C_{12} alkyl-aryls or aryl-alkyls;

R_f has a number average molecular weight in the range 200-5,000, and it comprises repeating units having at least one of the following structures, statistically placed along the chain:

$(CFXO)$, (CF_2CF_2O), $(CF(CF_3)CF_2O)$, $(CF_2CF(CF_3)O)$,

wherein X = F or CF_3.

2. (Previously Presented) Process according to claim 1, wherein Rf has one of the following structures:

1) $-(CF_2O)_{a'} - (CF_2CF_2O)_{b'} -$

with a'/b' comprised between 0.5 and 2, extremes included, a' and b' being integers such to give the above mentioned molecular weight;

2) $-(C_3F_6O)_r - (C_2F_4O)_b - (CFXO)_t -$

with r/b = 0.5 - 2.0; (r+b)/t is in the range 10-30, b, r and t being integers such as to give the above mentioned molecular weight, X has the above indicated meaning;

3) $-(C_3F_6O)_{r'} - (CFXO)_{t'} -$

t' can be 0;

when t' is different from 0 then r'/t' = 10 – 30,

r' and t' being integers such as to give the above mentioned molecular weight; X has the above indicated meaning.

3. (Previously Presented) Process according to claim 1, wherein in structure (II) the other end group is of T-O- type, wherein T is a (per)fluoroalkyl group selected from: $-CF_3$, $-C_2F_5$, $-C_3F_7$, $-CF_2Cl$, $-C_2F_4Cl$, $-C_3F_6Cl$; optionally one or two F atoms, preferably one, can be replaced by H.

4. (Previously Presented) Process according to claim 1, wherein the compounds (I) and (II) are used in mixture.

5. (Previously Presented) Process according to claim 1, wherein the perfluoropolyether derivatives have formula (I) with R_f having structure (3).

6. (Previously Presented) Process according to claim 1, wherein the substrata having a low surface energy are selected from the groups consisting of:

polytetrafluoroethylene, polyolefins, polyolefine elastomers, thermoplastic copolymers of tetrafluoroethylene, thermoplastic homopolymers and copolymers of vinylidenfluoride or of chlorotrifluoroethylene.

7. (Previously Presented) Process according to claim 1, wherein the (per)fluoropolyether derivatives are applied on the substrata by brushing, spraying, padding.

8. (Previously Presented) Process according to claim 1, wherein the (per)fluoropolyether derivatives are used in formulations comprising solvents or water/solvent mixtures.

9. (Previously Presented) Process according to claim 8, wherein the solvents are polar and are selected from the following classes:

aliphatic alcohols having from 1 to 6 carbon atoms; aliphatic glycols having from 2 to 8 carbon atoms, aliphatic glycols having an esterified hydroxyl; ketones or esters having from 3 to 10 carbon atoms.

10. (Previously Presented) Process according to claim 8, wherein as water/solvent mixtures, ketone/water or alcohol/water mixtures in a ratio by volume between 10:90 and 90:10 are used.

11. (Previously Presented) Process according to claim 8, wherein in the formulations the concentration of the (per)fluoropolyethers of formula (I) and (II) is generally in the range 0.1 - 30% by weight.

12. (Previously Presented) Process according to claim 1, wherein the amount of (per)fluoropolyether compound applied on the substratum surface is in the range 0.1 - 20 g/m^2.

13. (Previously Presented) Process according to claim 1, wherein the polar solvent is combined with water, or with water in the presence of a silanization catalyst.

14. (Previously Presented) Process according to claim 1, wherein a thermal treatment cycle to favor the crosslinking is used.